

### **INTRODUCTORY COMMENTS**

Claims 44-46, 48-52, 55, 58, 70-72 and 74-77 were pending in the subject application for the non-final Office Action dated June 24, 2009. Each of the pending claims currently stands rejected. In view of the following amendments and remarks, reconsideration and allowance of the subject application are hereby requested.

## **AMENDMENTS TO THE CLAIMS:**

1.-43. (Cancelled)

44. (Previously Presented) A medical implant apparatus, comprising:

a receiver member having a longitudinal axis and defining an upper opening portion and a lower opening portion, a channel transverse to and communicating with said upper opening portion, and an interior groove in said member substantially perpendicular to said axis, said upper opening portion having an internal thread and said lower opening portion being cylindrical and having a diameter;

a retaining member having an inner dimension and an outer dimension, said outer dimension being larger than said lower opening portion diameter, said retaining member occupying said groove, and wherein said retaining member comprises a substantially planar member having a top surface and an opposite bottom surface defining an overall height therebetween, and having a body width that is substantially constant throughout said retaining member between said top surface and said bottom surface along said overall height;

a longitudinal member at least partially within said channel; and

a set screw threaded into said internal thread of said receiver member and contacting said longitudinal member.

45. (Previously Presented) The apparatus of claim 44, wherein said groove communicates with said lower opening portion of said receiver member.

46. (Previously Presented) The apparatus of claim 44, wherein said retaining member is a substantially circular ring member.

47. (Cancelled)

48. (Previously Presented) The apparatus of claim 46, wherein said ring member includes a gap whereby said ring member can be contracted.

49. (Previously Presented) The apparatus of claim 44, wherein when said retaining member is within said groove, said retaining member is substantially immovable in a radial direction.

50. (Previously Presented) The apparatus of claim 44, further comprising a bone anchor having a head within said receiver member, said head having a diameter larger than said inner dimension of said retaining member.

51. (Previously Presented) The apparatus of claim 50, wherein said head of said bone anchor is substantially between said retaining member and said upper opening portion.

52. (Previously Presented) The apparatus of claim 50, wherein said retaining member substantially surrounds a part of said bone anchor.

53. (Cancelled)

54. (Cancelled)

55. (Previously Presented) The apparatus of claim 58, further comprising a longitudinal member at least partially within said channel.

56. (Cancelled)

57. (Cancelled)

58. (Previously Presented) An apparatus for receiving and holding components of a multi-axial bone anchor system, comprising:

a receiver member defining an upper opening portion and a lower opening portion, a channel transverse to and communicating with said upper opening portion and said lower opening portion, and a groove around at least a portion of said lower opening portion, said lower

opening portion having a first cylindrical portion adjoining and above said groove and a second cylindrical portion adjoining and below said groove;

a closure member at least partially within said upper opening portion, wherein said closure member includes a set screw, and wherein said receiver member includes internal reverse-angle threads, and said set screw includes external threads capable of threadable mating with said reverse-angle threads; and

a bone anchor member having a head at least partially within said lower opening portion, wherein said receiver member includes at least two branches defining said channel, said branches being internally threaded.

59.-69. (Cancelled)

70. (Previously Presented) A medical implant apparatus, comprising:

a receiver member having a longitudinal axis and defining an upper opening portion and a lower opening portion, a channel transverse to and communicating with said upper opening portion, and an interior groove in said receiver member, said groove having an upper limiting surface and a lower limiting surface, both of said limiting surfaces being substantially perpendicular to said axis and defining a groove height;

a retaining member having an inner dimension and an outer dimension, said retaining member occupying said groove, and wherein said retaining member has a top surface, an opposite bottom surface, and an overall height between said top surface and said bottom surface that is substantially equal to said groove height; and

a longitudinal member at least partially within said channel,  
wherein said upper opening portion is internally threaded.

71. (Previously Presented) The apparatus of claim 70, wherein said groove is between two cylindrical portions of said lower opening portion.

72. (Previously Presented) The apparatus of claim 70, further comprising a bone anchor having a head that is at least part spherical and a crown member, said apparatus having a

locked condition in which said anchor head contacts said retaining member and said crown member but not said receiver member.

73. (Cancelled)

74. (Previously Presented) A medical implant apparatus, comprising:

a receiver member having a longitudinal axis and defining an upper opening portion and a lower opening portion, a channel transverse to and communicating with said upper opening portion, and an interior groove in said lower opening portion, wherein said lower opening portion is substantially cylindrical and has a diameter, and said groove has a groove diameter, and said groove diameter is larger than said lower opening portion diameter;

a retaining member having an inner dimension and an outer diameter, said retaining member comprising a substantially circular ring member that can be contracted for insertion into said groove, and wherein said retaining member has an outer diameter in a natural non-contracted condition that is greater than said groove diameter such that said retaining member is compressed against an outer wall of said groove and is substantially immovable in a radial direction when occupying said groove; and

a longitudinal member at least partially within said channel,  
wherein said upper opening portion is internally threaded.

75. (Previously Presented) The apparatus of claim 74, wherein said groove is between two cylindrical portions of said lower opening portion.

76. (Previously Presented) The apparatus of claim 74, further comprising a bone anchor having a head that is at least part spherical and a crown member, said apparatus having a locked condition in which said anchor head contacts said retaining member and said crown member but not said receiver member.

77. (Previously Presented) The apparatus of claim 52, wherein said part of said bone anchor substantially surrounded by said retaining member is a neck of said bone anchor.

78. (New) The apparatus of claim 70, wherein said retaining member includes a hollow interior and a first internal surface extending obliquely from said top surface.

79. (New) The apparatus of claim 78, wherein said retaining member includes a second internal surface extending obliquely from said bottom surface.

80. (New) The apparatus of claim 79, wherein said retaining member further includes a third internal surface positioned between said first and second internal surfaces, said third internal surface extending substantially orthogonally to said top and bottom surfaces.